CHAPTER III

THE COST OF FUTURE PAY RAISES UNDER CURRENT LAW AND ALTERNATIVES

With budget deficits projected to continue into the foreseeable future, the pay of federal employees will probably remain a target of efforts to reduce spending even in the absence of concern about the pay system. Accordingly, the Congressional Budget Office has prepared projections of costs under the current system and savings under several alternatives. The alternatives to current law all involve broad caps on federal raises--one of the more direct approaches to achieving large savings in pay costs.

Any of the options set forth below could be accompanied by changes in pay surveys, job classification, or the method of allocating raises among areas and occupations. As previously described, such reforms could improve the effectiveness of whatever level of raise the government granted and could offer other advantages. They would also significantly affect the raises some employees would otherwise receive. Most such reforms, however, would not markedly alter the savings estimates described for each option.

Under the first alternative, the government would grant no raises in 1996. That approach produces significant savings with only a temporary departure from current practice. The second alternative would abandon the process of comparing salaries in different localities and would instead grant across-the-board raises tied to the employment cost index. That action would reduce costs compared with those under current practice and would appeal to many critics of the locality pay system. The third option would leave the current system in place but would delay some of the raises under current law. The benefit of that approach is largely budgetary. The final option considers the impact of granting locality pay raises only to workers in occupations for which salaries are far behind the private sector, thereby directing federal resources to where they are needed most.

The savings estimated for different alternatives to current practice show how much the government would save--that is, by how much less spending would grow--compared with granting full raises under the Federal Employees Pay Comparability Act. To reduce the payroll below some current level rather than simply limit future growth as the four options do, the government would have to adopt limits on pay and employment that are much more severe than those considered here.

The savings estimates, which were derived using the pay model described in Box 2, assume that the current gap between federal and nonfederal salaries is 27.5

BOX 2.
CBO'S MODEL FOR ESTIMATING FEDERAL PAY COSTS

The Congressional Budget Office's (CBO's) model for estimating nonpostal civilian pay costs is designed to give quick and coherent answers to the types of questions most frequently asked by policymakers. The model is versatile enough to depict the effects of current law and many suggested alternatives. CBO actually employs two models--one for the Department of Defense and another for all civilian agencies. Both work in much the same manner.

CBO begins with a pay base and employment levels in the current or previous year. The pay base encompasses direct wage and salary payments--base salary plus overtime and other premium pay--to full- and part-time employees. It is augmented by agencies' costs for selected benefits (chiefly contributions to retirement plans) that move up or down with pay scales. CBO relies largely on object class data (information collected by the Office of Management and Budget describing agency obligations by the nature of the good or service obtained) for figures on direct pay and applies its own assumptions about retirement coverage and contribution rates.

The pay base must be split into many pieces. The General Schedule covers about three-fourths of both employees and payroll, but many other systems exist, each with its own statutory language governing pay raises. For the executive branch alone, CBO distinguishes among General Schedule, Wage Board, Veterans Administration medical, Foreign Service, revolving fund, uniformed (Coast Guard and Public Health Service), Executive Schedule, "other senior" (mainly Senior Executive Service), and "all other" personnel. A special category--foreign national indirect hires--is relevant only for the Defense Department and is often omitted from federal employment and payroll totals. The legislative and judicial branch payrolls are split into the (relatively small) amounts going to Members of Congress and judges, and the (much greater) amounts going to rank-and-file employees of the House and Senate, the legislative support agencies, and the court system. Despite gaps in the data, the resulting dollar figures are satisfactory though far from perfect.

CBO projects future pay costs simply by taking each initial pay base and adjusting it by three factors: changes in the level of employment, effective across-the-board raises, and effective locality raises. Other factors--such as changes in the skill mix or other composition of federal employment--are absent, not because they are irrelevant but because CBO seldom has solid information on which to base assumptions.

Unless otherwise specified, employment levels in the executive branch through 1999 are assumed to match the full-time-equivalent employment limits enacted in the Federal Workforce Restructuring Act of 1994. Across-the-board raises for most groups under current law are pegged to the growth in the employment cost index minus one-half of a percentage point. Current law grants locality raises only to General Schedule employees, although similar raises have also been given to other personnel. Locality raises are linked to the estimated gap between federal and nonfederal salaries in many areas; CBO combines them into a nationwide average. For both types of raises, several factors--such as salary caps, the exclusion of interim geographic adjustments, and many special rates granted in the first rounds of locality raises--can drive a wedge between the announced raise and the effective raise. CBO uses the effective raise in its estimates. The most common requests requiring CBO to use the model involve paring across-the-board raises, locality raises, or both.

Under current law, pay raises occur in January, three months into the federal fiscal year. Thus, CBO applies a timing factor of 0.75 to gauge the cost of a pay raise in its first year, unless a proposal specifically calls for a different schedule. An exception is Wage Board personnel, whose raises are staggered throughout the year depending on their area.

percent. The estimates cover all three branches of government and reflect the savings from reductions in federal employment under the Federal Workforce Restructuring Act of 1994. They also reflect the impact of the pay raises on the General Schedule payroll and the payroll of white- and blue-collar pay plans linked to the General Schedule.

The amounts represent net savings to the government--that is, savings reduced to reflect contributions to federal retirement systems. (Those contributions are transfers between federal budget accounts that do not affect federal outlays.) Locking in deficit reduction by limiting pay raises, however, would require lowering caps on discretionary spending. Short of such action, savings from smaller pay raises for federal employees could be applied to other priorities--with no reduction in federal deficits.

FUTURE PAY RAISES UNDER CURRENT LAW

If the government adopted no limits on pay and granted the full raises authorized by FEPCA, ECI-based adjustments would accumulate to 16 percent of pay and locality raises to 14 percent of pay over five years (see Table 10). Those raises would cost $64 billion over five years and push the annual federal payroll to about $110 billion by 2000. Costs in 1996 would total $3 billion, assuming an ECI-based adjustment of 2.4 percent and an average locality adjustment of 3.4 percent.

A number of arguments support granting full raises. Federal employees have already sacrificed abundantly on behalf of deficit reduction. Before FEPCA, the raises the government granted in most years were well below the full level provided for under law. Under the new system established by FEPCA, battles over the size of raises have already become an annual occurrence.

Further limiting the pay of federal employees raises questions of fairness and workers' morale. Motivating employees and preserving their morale would seem particularly critical now as those spared by employment cutbacks take on the work of their departed colleagues while they attempt to cope with the growing workload of many programs. In fact, one wonders how long the government can continue to meet its expanding obligations in some areas, such as law enforcement, if it continues to simultaneously limit pay, reduce employment, and as proposed by some analysts, limit the use of contracts with private firms--the only means other than federal employees that the government has for delivering mandated services.

The government's need to recruit and retain workers also argues for full pay raises. Uncompetitive federal salaries and the associated problems agencies had in

TABLE 10. PAY RAISES AND THEIR COSTS UNDER CURRENT LAW, 1996-2000

	1996	1997	1998	1999	2000	Cumulative Five-Year Totals
Cost (Billions of dollars)	3.18	7.87	12.63	17.37	22.65	63.68
ECI Raises (Percent)	2.40	3.20	3.10	3.00	3.00	15.59
Locality Raises (Percent)	3.37	2.59	2.37	2.42	2.47	13.93

SOURCE: Congressional Budget Office.

recruiting and retaining workers gave rise to FEPCA in the first place. Yet systematic evidence of either widespread recruitment and retention problems in government, or the absence thereof, does not exist. And critics have noted that other conditions of federal employment--such as generous benefits, job security, and the chance to serve the public--can offset the effects of comparably low federal salaries. (Given recent downsizing and the proposals to cut federal retirement benefits, arguments about superior federal benefits and job security carry less force.) From that perspective, pay does not have to be comparable to be competitive. A 1992 survey by the General Accounting Office, in fact, confirms that many factors other than pay influence federal employees' decisions to stay in government.[1]

Nevertheless, salary undeniably plays a role in federal recruitment and retention efforts. Studies by both the Merit Systems Protection Board and the General Accounting Office demonstrate that pay holds a key place in decisions to join or stay in federal service--especially among the best and the brightest.[2] Repeated limits on federal pay cannot help but make federal service unattractive to ever increasing portions of the labor force and, at some point, will impose unacceptable burdens on agencies that need competent workers to get jobs done. Special rates and other similar measures help, but at the cost of fragmenting the federal pay system and greatly increasing its complexity.

Recent developments place a premium on the government's ability to compete for employees. The government needs talent to help support the reinvention of

1. General Accounting Office, *How Federal Employees View the Government as a Place to Work*, GAO/GGD 92-91 (June 1992).

2. Merit Systems Protection Board, *Why Are Employees Leaving the Federal Government?* (May 1990); and General Accounting Office, *Comparison of Applicants Who Accepted or Declined Federal Job Offers*, GAO/GGD 92-61 BR (March 1992).

government and other reforms and to help it in its increasingly difficult task of doing more with less. The government also needs to prepare to replace the large number of experienced workers expected to retire beginning around the turn of the century. Future conditions in the labor market could make competitive salaries even more important. Reports by the Office of Personnel Management warn that beginning early in the next century, the number of college graduates will decline even as the demand for skilled workers increases.[3]

OPTION I: GRANT NO RAISES IN 1996

If the government decides to try to limit costs under FEPCA, one option would be simply to skip raises for one or more years. Granting no raises in 1996, for example, would save $3 billion for the year and $10 billion over five years (see Table 11).

Limiting the growth of federal salaries may generally be viewed as part of an overall belt-tightening brought on by federal budget deficits. Such constraints on spending are not confined to the federal government; financially strapped firms in the private sector and local governments have been forced to cut personnel costs through layoffs, pay limits, or other measures.

This option represents a more temporary departure from FEPCA than some of the others described here. Federal salaries would still reach comparability, but some of the raises required to get there would not be given until after 1996. That outcome occurs because granting no adjustments in a year can generally be expected to produce higher pay gaps, and thus higher locality raises, in later years.

Should the government choose to skip raises, it would not be the first time. In 1986, out of concern for continuing high deficits, the government granted no general pay increase.

OPTION II: GRANT ONLY ECI RAISES

As another alternative to current practice, the government could do away with locality pay and grant only a raise tied to changes in the ECI. Such action would reduce the government's costs below what it would otherwise spend under FEPCA by $22 billion over five years. The estimate assumes annual pay raises accumulating to 18 percent over the period. Savings in 1996 would total $1 billion assuming a pay raise of 2.9 percent.

3. Office of Personnel Management, *Federal Staffing Digest* (April 1991); and OPM, *Civil Service 2000* (June 1988).

TABLE 11. PAY RAISES AND OUTLAY SAVINGS UNDER ALTERNATIVES TO CURRENT LAW, 1996-2000

	1996	1997	1998	1999	2000	Cumulative Five-Year Totals
			Option I: Grant No Raises in 1996			
ECI Raises (Percent)	0	3.20	3.10	3.00	3.00	12.88
Locality Raises (Percent)	0	6.05	3.96	2.65	2.68	16.20
Savings (Billions of dollars)	3.18	2.91	1.59	1.15	1.00	9.83
			Option II: Grant Only ECI Raises			
ECI Raises (Percent)	2.90	3.70	3.60	3.50	3.50	18.42
Savings (Billions of dollars)	1.32	2.87	4.32	5.83	7.63	21.97
			Option III: Grant Only Locality Raises			
Locality Raises (Percent)	3.37	2.59	3.96	5.10	5.65	22.42
Savings (Billions of dollars)	1.21	3.37	4.94	5.64	5.95	21.11
			Option IV: Target Locality Raises Toward the Most Underpaid Workers			
ECI Raises (Percent)	2.40	3.20	3.10	3.00	3.00	15.59
Locality Raises (Percent)	8.11	3.63	3.34	3.34	3.34	23.64
Savings (Billions of dollars)	0.16	0.74	1.44	2.21	3.14	7.68

SOURCE: Congressional Budget Office.

NOTES: The pay raises described are the average increases in pay for employees who receive them. Actual increases in federal payroll would be less because some employees--for example, those who receive special pay rates designed to help the government recruit and retain employees--do not always receive locality adjustments.

ECI = employment cost index.

This particular approach to limiting federal pay recognizes, based on a long record of failure, that the government will probably never accept the full cost of providing federal salaries comparable with those offered by nonfederal employers. Federal rates on average would keep pace with rates offered by other employers, but they would never catch up. (To this end, the CBO estimate assumes that the government grants the full ECI raise rather than the reduced raises under FEPCA.)

Supporters of this approach would argue that maintaining federal salaries at below-market rates is a fair trade for the generous package of benefits that federal employees have. In their view, raising pay to comparability, along with generous benefits, would push federal compensation well above levels in the private sector. (If, however, the government proceeds with proposed cuts in retirement benefits and continues to limit federal salaries, it could eventually face a crisis in its ability to recruit and keep quality workers.) In abandoning the principle of comparability, moreover, the government could drop the costly and controversial annual surveys, the results of which it uses to calculate locality pay adjustments that it might not grant anyway. Agencies could continue to handle recruitment and retention problems with special pay rates and other measures. That treatment would further complicate an already complex system, but it would also promote the kind of flexibility and decentralized control advocated by the National Performance Review.

Of course, the government would not have to abandon comparability raises forever. It could recommend annual surveys and adjustments at a later date when it deems budget conditions more favorable. Instead of using the current annual locality survey and adjustment process, the government could set up a system that provides for periodic review. Such a review could take many forms. For example, the government could, from time to time, appoint blue-ribbon panels of experts charged with developing recommendations for broad changes in basic federal salaries. Those panels could consider a variety of information, in addition to pay gaps, in making their recommendations. Such an approach would serve to mute criticism of the government's methods for comparing pay, criticism that has continued unabated despite repeated improvements in the methods. If such panels operated in full view of the public, with public hearings, they might also alleviate some of the concerns citizens have about excessive federal salaries.

OPTION III: GRANT ONLY LOCALITY RAISES

If the government discontinued ECI-based adjustments for most workers and instead granted only locality raises, five-year savings would accumulate to $21 billion. The estimated cost assumes cumulative annual locality adjustments of 22 percent. The savings in 1996 would total $1 billion, assuming locality raises averaging 3.4

percent. (The estimates assume that employees ineligible for locality pay raises would continue to receive ECI adjustments.)

This approach to limiting pay raises would represent less of a departure from current policy, if not practice, than granting only ECI-based adjustments. Federal salaries would still reach comparability by 2002, but as under Option I, some of the raises required to get there would occur later. Failure to grant ECI adjustments would widen the gap to be closed in later years, resulting in larger locality adjustments at that time. The option, in effect, would delay some of the costs of comparability, but it would preserve the notion that pay scales should differ in different labor markets.

OPTION IV: TARGET LOCALITY RAISES TOWARD THE MOST UNDERPAID WORKERS

Another alternative would grant locality pay raises only to federal employees whose pay is farthest behind that of their nonfederal counterparts. If, for example, the government granted locality raises only to professionals--the group with the largest overall pay gap--savings over five years would accumulate to $8 billion. (The estimate assumes that other workers would continue to receive ECI-based raises.) Locality raises for professionals would accumulate to 24 percent of pay through 2000.

This approach directs scarce federal resources to where they are needed most. Professional occupations have presented government with some of its most stubborn and persistent recruitment and retention problems. Data from the Office of Personnel Management suggest that the pay gaps for that group average about 40 percent.

This approach addresses only some recruitment and retention problems, however, and other problems would remain. Professionals, after all, make up only 22 percent of the white-collar workforce. Singling out only one group of workers for raises, moreover, would inevitably cause morale problems and raise questions of fairness. Targeting raises toward professional workers in particular would be cause for concern given that women and minorities are heavily represented in occupations that would not receive raises. Finally, if the government recommended locality raises for all workers at a later date, this option would represent merely a postponement of costs.

APPENDIX A

OTHER WHITE-COLLAR PAY PLANS

In addition to the General Schedule (GS), dozens of other pay plans cover civilian white-collar workers of the federal government. Many of those plans have links to the General Schedule. Pay for employees at the highest levels is governed mainly by the Executive Schedule or by rates set for members of the Senior Executive Service. Other significant white-collar pay plans include those covering the Foreign Service and medical personnel at the Veterans Health Administration of the Department of Veterans Affairs.

EXECUTIVE PAY AND EMPLOYMENT

Two plans govern the pay of most executives in government. The Executive Schedule and the rates set for the Senior Executive Service together cover about 8,200 employees with payroll representing about 1 percent of the total for all workers.

Employees at the very highest levels of government, such as cabinet secretaries, agency administrators, and chairs of boards and commissions, are paid according to the Executive Schedule. Most of those positions require appointment by the President. Executive Schedule employment totaled about 410 as of March 1994. Payroll for the group amounted to $49 million as of the same date.

The Executive Schedule consists of five levels. Salaries range from $108,200 for administrators, deputy directors, commissioners, and others at level V to $148,400 for cabinet-level positions at level I. Under authority of the Ethics Reform Act of 1989, pay for positions covered by the Executive Schedule and for Members of Congress and judges increases in January of each year. The first such adjustment occurred in January 1991. The adjustment equals the change in private-sector wages and salaries, as measured by the employment cost index (ECI), minus one-half of a percentage point. (The relevant measure for the January adjustment is how the ECI level for the October-through-December quarter ending 12 months earlier compares with the level of the corresponding quarter one year before that. The calculation for GS employees differs in that its reference point is the July-through-September quarter.) Employees on the Executive Schedule did not receive a raise in pay in 1994 or 1995.

Adjustments in pay for federal executives may also occur as a result of recommendations by the Citizens' Commission on Public Service and Compensation, a group that may be appointed every four years for the purpose of reviewing top salaries in government. After considering the commission's report, the President submits recommendations for changes in executive and other salaries for approval by the Congress.

Just below the agency heads and others covered by the Executive Schedule are members of the Senior Executive Service. The SES was established in 1979 under the authority of the Civil Service Reform Act of 1978. It covers managers and supervisors at the top of the career Civil Service. In fact, the SES was formed largely from positions once graded 16, 17, and 18 on the General Schedule. Most members of the SES are career employees who competed on merit for admission; the rest are political appointees. As of March 1994, SES employees numbered 7,800, with payroll totaling about $850 million.

Pay for members of the SES is set at one of six basic rates, depending on individual qualifications. That approach contrasts with the practice for employees covered by the General Schedule, whose pay primarily reflects the duties and responsibilities of the job assigned. Systems such as the SES that instead weight personal qualifications more heavily are often referred to as rank-in-person systems. The primary advantage of such systems is the flexibility they afford in assigning work. As the need arises, managers can assign employees at a given rank and pay to a variety of tasks.

The minimum basic rate of pay for the SES is the salary rate at grade 15, step 1, of the General Schedule times a factor of 1.20. The maximum rate may not exceed level IV of the Executive Schedule. Those basic rates of pay range from $92,900 at level 1 to $115,700 at level 6. The President may adjust the basic rates each January. In recent years, the adjustments have equaled those made to the Executive Schedule. No adjustment to basic rates was made in 1994 or 1995.

The government has, however, extended to the SES the locality adjustments granted to GS employees. Accordingly, the actual salary SES members receive varies from area to area. Pay with locality adjustments in Washington, D.C., for example, ranges from $97,991 at level 1 to $122,040 at level 6. Adjusted salaries may not exceed the salary at level III of the Executive Schedule. That limit has served to cap top SES pay in areas such as Houston, Texas, where locality raises were high.

In addition to salary, members of the SES may receive awards and bonuses based on performance. Total annual compensation--pay and bonuses--may not exceed the pay at level I of the Executive Schedule.

PAY AND EMPLOYMENT IN THE FOREIGN SERVICE

By tradition, the Congress has recognized the need in the conduct of foreign relations for a separate, flexible personnel system designed to ensure a highly trained and stable workforce. Current procedures for paying employees in the Foreign Service were established primarily by the Foreign Service Act of 1980. As described here, the Foreign Service covers chiefs of mission, members of the Senior Foreign Service (SFS), Foreign Service officers, and Foreign Service support personnel. Those employees, the majority of whom work for the Department of State, numbered about 13,500 as of March 1994, with payroll totaling about $790 million. Separate pay policies govern the various subgroups of the Foreign Service listed above and have links to policies in other pay systems.

Chiefs of mission, many of whom hold the title of ambassador, stand at the top levels of the Foreign Service. The President appoints them, and they may be chosen from the ranks of the career Foreign Service or from elsewhere. The current salaries of chiefs of mission are tied to levels III and IV of the Executive Schedule.

Management-level experts and others in foreign relations may belong to the Senior Foreign Service. Like the Senior Executive Service, the SFS is a rank-in-person system that bases pay primarily on individual qualifications. Basic salary rates for the SFS lie between the minimum and maximum rates for the SES. Employees stationed in the United States may also receive locality pay adjustments. In addition to salary, members of the SFS may receive awards and bonuses based on performance.

Almost 90 percent of the employees in the Foreign Service are either Foreign Service officers, who hold jobs such as personnel administrator and information analyst, or support personnel, who hold jobs such as secretary and clerk. Pay rates for this group of employees are set out in the Foreign Service Schedule. Similar to the General Schedule with its grades and steps, the Foreign Service Schedule consists of nine classes, each with 14 steps. The maximum salary for the highest class (class 1) is the same as that for a GS 15. The lowest pay for class 9 is linked to the minimum pay at GS 5. The Foreign Service, like the SES and the SFS, is a rank-in-person system in contrast to the General Schedule system.

PAY AND EMPLOYMENT FOR MEDICAL PERSONNEL AT THE DEPARTMENT OF VETERANS AFFAIRS

Doctors, dentists, optometrists, nurses, and other medical professionals at the Veterans Health Administration of the Department of Veterans Affairs (VA) also have separate pay systems. As of March 1994, those employees numbered 42,200, with payroll totaling $2.2 billion.

The creation of an independent personnel system for this group dates back to 1946. Before that, medical personnel at the VA were included in the regular Civil Service with other employees. Supporters of a separate system for health professionals, like those who argued for a separate plan for the Foreign Service, hoped for more flexible policies and practices that would aid the recruitment and retention of better personnel. Though separate, the system at the VA has maintained some links to the General Schedule.

The system at the VA consists of a number of separate pay plans, each covering a different group of occupations. Policies and practices vary somewhat from plan to plan. All plans, however, share certain characteristics. The VA system, like the Foreign Service and the SES, determines pay primarily on the basis of individual accomplishment rather than duties and responsibilities. In addition, each plan in the system incorporates some element that adapts pay to conditions in local labor markets.

Doctors and dentists are paid according to a schedule consisting of seven grades, each with a minimum and maximum salary. The pay range at the lowest, or associate, grade corresponds to the pay at grade 11 of the General Schedule. The pay at the highest grade ranges from $79,684 to $98,960, which corresponds to the former grade 16 of the General Schedule (grades 16, 17, and 18 no longer exist). Rates rise with ECI adjustments to the General Schedule.

In addition to these basic salaries, doctors and dentists at the VA may receive special pay amounting to tens of thousands of dollars based on a variety of factors such as geographic location, length of service, and medical specialty. Special pay is intended to help to recruit and retain high-quality staff.

Optometrists, podiatrists, and physicians' assistants also have a graded pay schedule with minimum and maximum salaries. For podiatrists and optometrists the pay at the lowest and highest grades is linked to GS grades 11 and 15, respectively. For physicians' assistants, the linkage is to grades 6 and 15. These basic rates, like those for doctors and dentists, rise with ECI adjustments to the General Schedule.

Nurses have an independent locality pay system with rates and adjustments based on comparisons with nonfederal nurses in more than 150 localities. The surveys for those comparisons must be conducted at least once a year. Rates in 1994 ranged from a low of $20,400 for nurses at grade 1 stationed in the Philippines and other areas to a high of $135,200 for nurses at the top of grade 5 in Bedford, Massachusetts.

APPENDIX B

PAY BANDING AND REFORM OF THE CLASSIFICATION SYSTEM

Fundamental reform of the classification system offers an alternative to addressing specific incidents of incorrect grading. One approach consolidates the grades of the General Schedule (GS) into broad ranges of pay, or pay bands. Such a system involves fewer distinctions between types and levels of work. It therefore offers the advantages of simplicity and flexibility.

The report of Vice President Gore's National Performance Review urged that agencies adopt pay-banding systems. A 1991 report by the National Academy of Public Administration set out a design for such a system that could serve as a model for federal agencies.[1] In addition, the government is testing pay banding at a number of agency demonstration projects.

PAY BANDING AT THE NAVY DEMONSTRATION PROJECT

One of the longest running and most thoroughly evaluated pay-banding demonstration projects is being conducted by the Navy. The project, started in 1980, involves four naval laboratories. Two laboratories in California--the Naval Command, Control and Ocean Surveillance Center in San Diego and the Naval Air Warfare Center in China Lake--have adopted the new personnel system. Two others--the Naval Air Development Center in Warminster, Pennsylvania, and the Naval Surface Warfare Center in Dahlgren, Virginia, and White Oak, Maryland--made no changes, serving as controls for purposes of comparison.

At the Navy demonstration laboratories, which have 12,000 employees, pay bands substitute for more narrowly defined GS grades, and career paths of related occupations substitute for more specific GS occupational designations. Scientists, engineers, and others, for example, make up a career path consisting of several pay bands that cover a number of GS grades. Advancement up the salary range covered by each pay band depends on good performance on the job. (By contrast, length of satisfactory service determines progress up the pay range of the General Schedule.)

Classification at the demonstration laboratories involves assigning positions to a pay band representing a broadly defined level of difficulty rather than to a more

1. National Academy of Public Administration, *Modernizing Federal Classification: An Opportunity for Excellence* (Washington, D.C.: NAPA, 1991).

narrowly defined General Schedule grade. As such, the decisions involved in classifying work become less complex, and the potential for error and disagreement drops. Classifiers, for example, no longer have to concern themselves with the often subtle distinction between professional work at grades 12 and 13. The broad pay bands not only increase the range of salaries a laboratory can offer to new recruits but also afford employees the opportunity for greater growth in pay. Moreover, compared with the GS system, the broad pay bands provide a wider range of salaries within which to make performance-based pay distinctions. All those advantages offer the potential for agencies to improve recruitment and retention.

SOME RESULTS OF THE DEMONSTRATION PROJECT

The Navy demonstration project has simplified personnel administration and improved employees' attitudes. Results for the project's other objectives are less clear. For example, evaluators collected no data for either the productivity of lab operations or the quality of lab work on which to base an assessment of organizational effectiveness. No analysis, however, has identified any serious problems with the experimental personnel system. And the project's accomplishments appear to have been gained at negligible cost.

In considering the effects of the demonstration project, one must recognize that the Navy designed its experimental system to meet the specific recruitment and retention needs for two specialized facilities--laboratories employing large numbers of scientists and engineers. Generally, the work at the laboratories is more technical, the workforce more homogenous and professional, and the organizational structure less hierarchical than for other government operations. Pay-banding systems appropriate for other operations may vary from the one examined here and therefore have different outcomes. Some people argue that pay banding may not be appropriate for all government operations. From that perspective, such systems would represent an optional arrangement for selective application by agencies.

The Office of Personnel Management (OPM) has conducted extensive evaluations of pay banding and the Navy demonstration project.[2] Among other findings, OPM's analysis indicates that personnel administration has become simpler. Evaluators noted fewer complaints about classification. The hours that both supervisors and personnel staff spent on each classification action dropped, as did the number of classification actions and the rate of classification errors. (OPM compared the performance of the demonstration labs with their performance before installing the new personnel practices and with the performance of the control laboratories.)

2. See, for example, Office of Personnel Management, *Broad-Banding in the Federal Government*, Technical Report (1992).

Employees' satisfaction with work and pay also seems to have improved under the demonstration project. In 1989, for example, 49 percent of employees at the demonstration laboratories reported they were satisfied with their pay compared with only 32 percent at the control labs. Consistent with the demonstration project, the rates at which employees separated at the demonstration labs were generally lower and less erratic than at the control labs. The OPM data also offer some evidence that demonstration labs were more successful than the control labs at retaining employees who performed well on the job.

EFFECTS OF THE NAVY'S SYSTEM ON COST

Given the limited scope of the demonstration projects, estimates of the cost of more widespread use of pay banding in government would amount to speculation. The Navy's experience suggests that the potential benefits of pay banding are achieved at modest cost and that costs would not necessarily have to rise. The demonstration project has indicated where management and design can limit the costs of pay-banding systems.

Salary Growth at the Navy Demonstration Project

Data show that, overall, salaries at the demonstration labs grew faster than salaries at the control labs between 1979 and 1990--64 percent compared with 60 percent. Consequently, the average salary at the demonstration labs, which in 1979 was 0.15 percent higher than at the control labs, was about 2.5 percent higher in 1990.

Most of the extra growth in salaries at the demonstration labs, however, reflects an initial employee buyout--an increase in base salaries designed to make the transition to the new system easier for employees. Comparison of salary growth for the period after the buyout--1980 through 1990--shows an almost identical change in salary. Salary growth varied by occupational group; scientists and engineers at the demonstration labs showed the clearest advantages regardless of the period considered.

Of course, a variety of factors that may or may not have anything to do with the experimental pay-banding system could have influenced the results described above. Employment at the demonstration labs, for example, grew much faster than at the control labs. All else being equal, a large increase in new employees at entry-level salaries will limit any increase in average salary in an organization.

In an effort to account for such factors and to obtain a clearer picture of the effects of pay banding on salary growth, OPM also tracked the salaries of a group of new employees hired in 1985. That analysis showed slower pay growth at the demonstration laboratories. For most of the occupational groups examined, salaries at the demonstration laboratories started out higher than those at the control laboratories but eventually fell behind because of smaller annual increases. For example, the salary for one group of professionals hired by the demonstration laboratories in 1985 was more than 20 percent higher than the salary for a similar group of new employees at the control laboratories. By 1990, salaries at the demonstration laboratories for this group had fallen 1 percent behind the salaries of the comparison group at the control laboratories. According to OPM, the demonstration laboratories have traded the more rapid increases that characterize the GS system for a system that offers higher starting salaries and, by virtue of banding grades together, the potential for greater, albeit slower, growth in pay. Higher starting salaries offer the opportunity to attract better candidates, and the promise of greater long-term career development raises the chance of keeping them.

Controlling the Costs of Pay-Banding Systems

The Navy's experience indicates how the management and design of pay-banding systems can influence costs. Such information offers a useful guide to any future expansion of the use of pay banding in government.

The structure of the transition to a pay-banding system, for example, appears to influence costs. OPM's analysis indicates that the Navy could have avoided some of the observed increase in average salaries at the demonstration labs by offering to buy out employees with one-time cash bonuses rather than granting permanent increases in base pay. In general, allowing the option of offering bonuses rather than increases in base pay will limit the costs of any pay-banding system. In addition, using a fixed pool of funds for pay increases, according to OPM, can serve to limit the rating inflation observed in other pay systems that base raises on performance. For example, OPM notes that in most years managers at the demonstration labs rated about half of all workers at the mean of a five-point performance rating scale. By contrast, 80 percent of employees under the former Performance Management and Recognition System received ratings above the mean in 1990.[3] Finally, managers can limit the costs of pay-banding systems when they use the flexibility inherent in such systems to make better use of staff. They could, for example, use temporary workers where appropriate, or they could substitute technical assistants for professional staff.

3. The Performance Management and Recognition System based federal pay raises on performance and covered General Schedule employees in grades 13, 14, and 15. The system was terminated in October 1993.